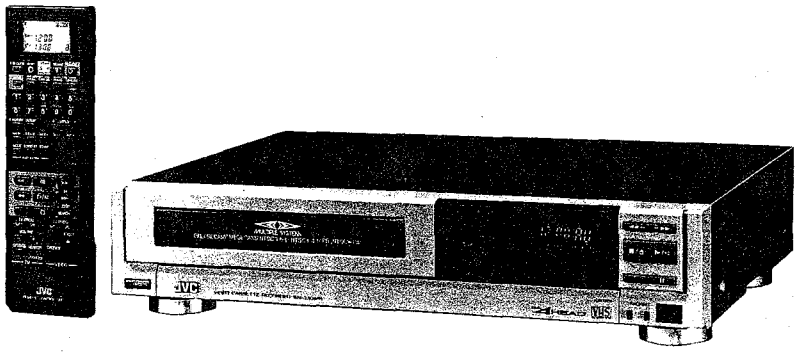
INSTRUCTIONS

JVC

SR-330MS

VIDEO CASSETTE RECORDER

VHS
PAL SECAM NTSC



PGD30002-275

SAFETY PRECAUTIONS

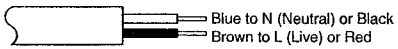
The rating plate and the safety caution are on the rear of the unit.

WARNING — DANGEROUS VOLTAGE INSIDE
WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

IMPORTANT (In the United Kingdom)
Mains Supply (240 V~, 50 Hz only)

IMPORTANT

Do not make any connection to the Larger Terminal coded E or Green. The wires in the mains lead are coloured in accordance with the following code:



If these colours do not correspond with the terminal identifications of your plug, connect as follows:
Blue wire to terminal coded N (Neutral) or coloured Black.
Brown wire to terminal coded L (Live) or coloured Red.
If in doubt — consult a competent electrician.

CAUTION

- When you are not using the recorder for a long period of time, it is recommended that you disconnect the power cord from the AC outlet.
- Dangerous voltage inside. Refer internal servicing to qualified service personnel. To prevent electric shock or fire hazard, remove the power cord from the AC outlet prior to connecting or disconnecting any signal lead or aerial.

Omkopplaren OPERATE på denna apparat är sekundärt kopplad och skiljer inte apparaten från nätet i läge OPERATE OFF.

The OPERATE button does not completely shut off mains power from the unit, but switches operating current on and off.

BEMAERK: I stilling OFF er apparatet stadig forbundet med lysnettet Hvis det ønskes fuldstændig afbrudt skai netledningen trækkes ud.

This unit is produced to comply with Directives 76/889/EEC, 82/499/EEC, 87/308/EEC and Standard IEC Publ. 65.

POWER SYSTEM
This set operates on any voltage between 120 and 240 V, 50/60 Hz with automatic switching.
There is no switch nor control for power line adaptation.

Video tapes recorded with this video recorder in the LP (Long Play) or EP (Extended Play) mode cannot be played back on a single-speed video recorder.

VHS PAL SECAM NTSC HQ

- Only cassettes marked "VHS" can be used with this video recorder.
- HQ VHS is compatible with existing VHS equipment.

CONTENTS

Precautions 3
VCR
Video Cassettes
Remote Control Unit
Features 4
Controls and Connectors
Front Panel 5
Rear Panel 7
Remote Control Unit
Controls and Operation 8
A/B Code Switching 10
VCR Lock Function 10
Displays 11
Display Panel
LCD (Liquid Crystal Display) panel
CTL Time Counter
Connections and System Setup
Connections 12
RF Converter Switch Setting 13
Video Channel Setting 13
Colour System Setting 14
Clock Setting
Built-in Clock 15
LCD Clock 16
Summer Time Adjust 16
Handling Video Cassettes 17
Loading
Unloading
Accidental Erasure Prevention
Playback
Basic Procedure 18
Rewind and Fast-Forward 18
Double-Speed Playback 18
Still and Frame Advance 18
Shuttle Search 18
Variable-Speed Search 19
Skip Search 19
Tracking Control 19
V.Lock Adjustment 19
Tape Access
Counter Memory 20
Next-Function Memory 20
Index Search 21
Index Mark/Erase 21
Intro Search 22
Go-to 22
Recording
Basic Procedure 23
Simultaneous Control of Two Recorders in Editing 23
Instant Timer Recording (Off-Timer) 24
24-Hour Timer Recording 24
Programmable Timer Recording
Timer Recording Procedure 25
Local Programming 25
Remote Programming 27
Troubleshooting Guide 29
Specifications 30

PRECAUTIONS

VCR

- Avoid using the recorder in places subject to the following conditions:
  - extreme heat, cold, or humidity,
  - dust,
  - vibrations, and
  - poor ventilation.
- Be careful of moisture condensation.
  Do not use the recorder immediately after moving it from a cold place to a warm place. The water vapour in warm air will condense on the still-cold video head drum and tape guides and may cause damage to the tape and the recorder.
- Handle the recorder carefully.
  - Do not block the ventilation openings.
  - Do not place anything heavy on the recorder.
  - Do not place anything which might spill on the top cover of the recorder.
  - Use in horizontal (flat) position only.
- During transportation,
  - Avoid violent shocks to the recorder during packing and transportation.
  - Before packing, be sure to remove the cassette from the recorder.

VIDEO CASSETTES

- This recorder uses VHS cassettes.

Cassettes	Recording time	Recording system
E-240	240/480 minutes	PAL/SECAM/MESECAM
E-180	180/360 minutes	PAL/SECAM/MESECAM
E-120	120/240 minutes	PAL/SECAM/MESECAM
E-90	90/180 minutes	PAL/SECAM/MESECAM
E-60	60/120 minutes	PAL/SECAM/MESECAM
E-30	30/90 minutes	PAL/SECAM/MESECAM
T-160	160/480 minutes	NTSC
T-120	120/360 minutes	NTSC
T-90	90/270 minutes	NTSC
T-60	60/180 minutes	NTSC
T-30	30/90 minutes	NTSC

- S-VHS cassettes can also be used in VHS operation.
- Avoid exposing the cassettes to direct sunlight. Keep them away from heaters.
- Avoid extreme humidity, violent vibrations or shocks, strong magnetic fields (near a motor, transformer or magnet) and dusty places.
- Place the cassettes in cassette cases and position vertically.

REMOTE CONTROL UNIT

- Avoid violent shocks. Be especially careful not to drop the unit.
- Do not spill liquid on the unit or dampen the terminals.
- Do not place heavy objects on the unit.
- Avoid leaving the unit in places subject to direct sunlight or extremely high temperatures.

IMPORTANT: It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.

FEATURES

Multi-system recording/playback circuitry with Virtual NTSC Playback on a PAL TV

The SR-330MS's built-in PAL/SECAM/MESECAM/NTSC 3.58/NTSC 4.43 recording circuitry gives you the flexibility to produce ready-made VHS video tapes that match signal standards anywhere in the world. 5-System playback circuitry is also incorporated, so you'll be able to play back any prerecorded cassettes you receive — regardless of where they originated. For even greater flexibility, the SR-330MS features advanced circuitry that lets you play back NTSC tapes on a PAL monitor or television. This is especially convenient if your head office happens to be in the United States or Japan since both countries use the NTSC system. You'll be able to watch video tapes produced in those countries on an ordinary PAL monitor, eliminating the need for an expensive multi-system monitor or separate NTSC monitor. A built-in multi-system RF converter (G, I, K, L, M) is also provided for direct RF connection to any type of TV*.

* Except PAL-N and PAL-M.

Note:

- Recording requires an input video signal conforming to the appropriate television colour system and playback requires a TV monitor conforming to the appropriate television colour system except with NTSC playback on a PAL monitor.

Wired remote control capability

In addition to a full-function wireless LCD-programmable remote control, an optional wired remote control (RM-G30U) is available to give you the freedom of movement and the operational control you need in a classroom, during a business presentation, or at a conference. Clearly marked buttons give you full control over all basic tape functions including Play, Eject, Rewind, Fast Forward, and Shuttle Search.

High picture quality

For first-rate recording and playback performance, the SR-330MS incorporates JVC's advanced DA-4 (Double-Azimuth) head system. Using a different pair of precision-cut heads for each recording speed, the DA-4 head system ensures optimum picture quality in the SP, EP (NTSC), LP (PAL/SECAM/MESECAM) and special-effects modes. For improved clarity, sharpness, and detail, HQ (High Quality) picture improvement circuitry is also provided. Automatic Digital Tracking automatically compensates for any tracking variations during playback to assure a smooth, trouble-free performance at all times.

Special-effects playback

To facilitate careful viewing of specific scenes and visual search, a variety of special effects playback modes are available via the provided wireless remote control. These include noiseless* still and slow-motion playback at 5 different speeds, as well as variable-speed visual search.

* PAL/SECAM/MESECAM SP only.

Auto Voltage Switching Regulator

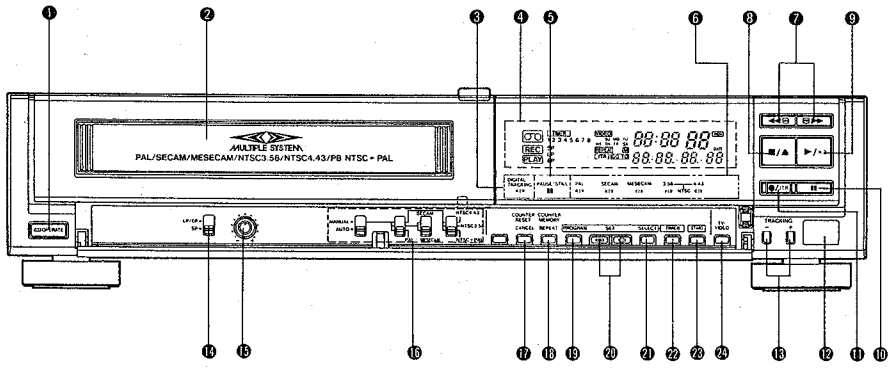
The SR-330MS features an automatic voltage switching regulator that operates on any electrical current from 120 V to 240 V AC.

Other features

- On-Screen record-pause mode display
- CTL time counter
- Advanced search functions including Index Search, Intro Search, Go-To, and Skip Search
- 1-year/8-event programmable timer
- 24-hour instant timer
- "Summer time" adjustment
- VCR lock function
- BNC connectors for VIDEO IN/OUT
- Aerial IN/OUT

CONTROLS & CONNECTORS

FRONT PANEL



❶ **OPERATE button with LED indicator**
❷ **Cassette loading slot**
❸ **DIGITAL TRACKING indicator**
❹ **Display panel**
❺ **PAUSE/STILL indicator**
- Pause mode: Lights together with the REC indicator on the display panel.
- Still mode: Lights together with the PLAY indicator on the display panel.

❻ **Colour system indicators**
Indicates the colour system in use according to the detected input signal or the settings of the colour system select switches ⓰. ☞ p.14.

❼ **◄◄/►► (REW/FF) buttons**
- Starts rewind or fast-forward when pressed in the Stop mode.
- Starts high-speed shuttle search when pressed in the Play mode.

❽ **■/⏏ (STOP/EJECT) button**
- Stops the tape.
- Ejects the cassette when pressed in the Stop mode.

❾ **►/X2 (PLAY) button**
- Starts playback.
- Starts double-speed playback when pressed in the Play mode.
- Re-starts normal playback when pressed in the Still, Double-speed, or Search mode.
- Re-starts recording when pressed in the Record-Pause mode.

❿ **⏸(PAUSE/STILL) button**
- Temporarily stops recording when pressed in the Record mode.
- Displays a still picture when pressed in the Play mode.

⓫ **●/ITR (REC) button**
- Starts recording when pressed together with the PLAY button.
- Activates the off-timer when pressed in the Record mode. ☞ p.24

⓬ **Infrared beam sensor window**
Point the remote control at this window.

⓭ **TRACKING buttons**
Adjusts tracking to minimise noise bars in playback picture.

⓮ **TAPE SPEED select switch**
Selects the recording speed: Standard Play or Long Play/Extended Play. In PAL/SECAM/MESECAM, the LP mode will be engaged; in NTSC, the EP mode will be engaged.

⓯ **PICTURE SHARPNESS control**
Turn for a softer or sharper playback picture.

⓰ **Colour system select switches**
- **Master (AUTO/MANUAL) switch**
  Set as desired for automatic or manual selection of the television colour system. If you select the MANUAL mode, you must set the appropriate sub-switches as required. The SECAM and NTSC sub-switches must be set correctly even in the AUTO mode. ☞ p.14.
- **System sub-switch**
  Use this switch to manually select the appropriate television colour system when the Master switch is set to MANUAL. ☞ p.14.
- **SECAM sub-switch**
  Use this switch to select MESECAM or SECAM in recording. This switch must be set correctly even in the AUTO mode. ☞ p.14.
- **NTSC sub-switch**
  Use this switch to select NTSC 3.58 or 4.43 in playback. Also be sure to set this switch correctly when playing back NTSC tapes on a PAL monitor. This switch must be set correctly even in the AUTO mode. ☞ p.14.

⓱ **COUNTER RESET/CANCEL button**
This is a dual-function button.
- Resets the CTL time counter.
- Cancels programmed timer data.

⓲ **COUNTER MEMORY/REPEAT button**
This is a dual-function button.
- Engages the Counter Memory mode. ☞ p.20
- Used in timer programming to select weekly or daily repeat options.

⓳ **PROGRAM/CLOCK ADJUST button**
Changes the VCR's display mode in the following order: Clock mode, Timer Set mode, Clock Set mode.

⓴ **SET/TRACKING/V. LOCK buttons**
To set data in the Clock Set mode or Timer Set mode. Also used as V.LOCK adjustment buttons to eliminate vertical vibration of still pictures.

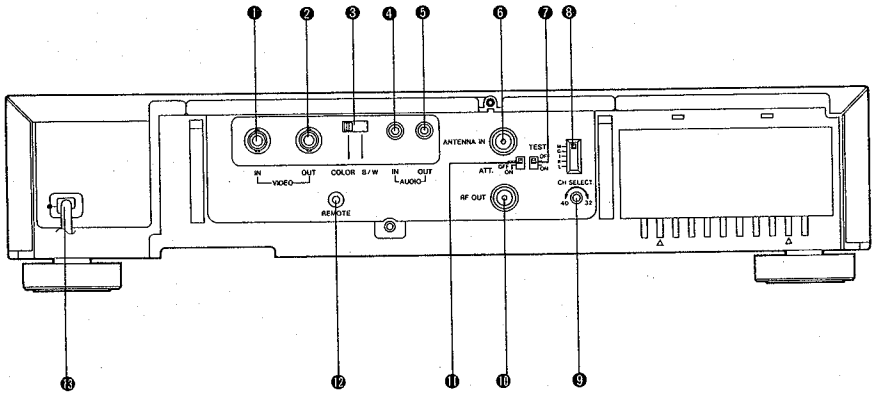
㉑ **SELECT/SUMMER TIME ADJUST button**
This is a dual-function button.
- Selects the item to be set in the Clock Set or Timer Set mode.
- For instant adjustment to or from Daylight Saving Time — press and quickly release to advance the clock by one hour, hold it pressed for 2 seconds to set the clock back by one hour. ☞ p.16

㉒ **TIMER button**
Engages the Timer Standby mode after the 1-year/8-event timer has been programmed.

㉓ **START button**
Activates 24-hour timer. ☞ p.24

㉔ **TV/VIDEO button**
Switches RF output between the video signal and the aerial signal.

REAR PANEL

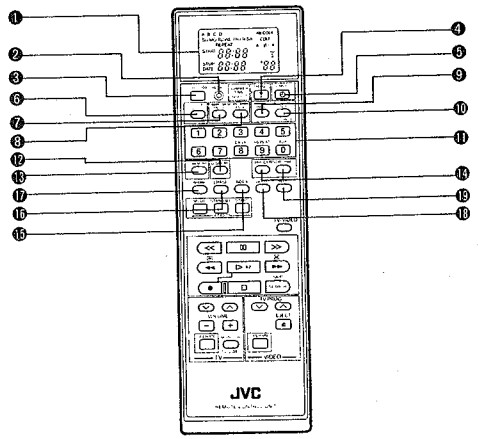


❶ **VIDEO IN connector**
❷ **VIDEO OUT connector**
❸ **Video mode select switch**
This applies to both recording and playback.
COLOR: Set to this position when the input or playback video signal is in colour.
B/W: Set to this position when the input or playback video signal is monochrome.
❹ **AUDIO IN connector**
❺ **AUDIO OUT connector**
❻ **Aerial input connector (ANTENNA IN)**
Connect an aerial to this connector.
❼ **TEST signal switch**
Set to ON when tuning your television to the VIDEO CHANNEL. A test signal in the form of two vertical white bars will be available.
❽ **SYSTEM select switch**
For RF converter system selection. Select M, G, I, K or L depending on the type of television. This switch is preset to G prior to shipment.
❾ **RF converter frequency adjustment screw (CH. SELECT)**
❿ **RF OUT connector**
Connect to your television's aerial connector with the aerial cable (provided).
⓫ **Attenuator switch (ATT.)**
When you connect an aerial to the TV through the VCR, set this switch to ON or OFF depending on the field strength of the aerial signal.
⓬ **REMOTE connector**
Connect the optional wired remote control.
⓭ **Power cord**

REMOTE CONTROL UNIT

- Point the remote control at the VCR's infrared beam sensor window.
- The maximum operating distance is about 8 m.

CONTROLS AND OPERATIONS

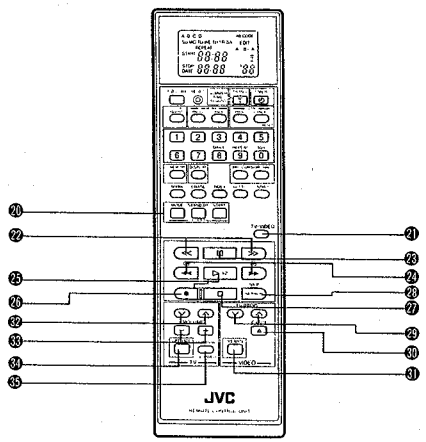


❶ **LCD panel**
Refer to this panel when programming the remote control's built-in timer memory.
❷ **RESET button**
To clear the LCD display's memory, insert a pointed object into the hole and press the initialise button inside. Normally do not touch this button.
❸ **A/B CODE button**
When using two JVC video decks, press to switch this remote control from the "A" mode to "B" mode, or vice versa, depending on the deck to be controlled. ☞ p.10
❹ **TRANS/SUMMER TIME ADJUST button**
This is a dual-function button.
- Transfers the data held in the remote control's timer memory to the recorder.
- Adjusts the remote control's clock to or from the summer time setting. ☞ p.16

❺ **TIMER button**
- Engages the Timer Standby mode after the 1-year/8-event timer has been programmed.

❻ **CLOCK ADJUST button**
Adjusts the remote control's clock.
❼ **MEMORY PROG. button**
Programs the remote control's timer memory.
❽ **MEMORY CANCEL button**
Cancels the programmed data in the remote control's timer memory.
❾ **VTR PROG. button**
Engages the VCR's Timer Set mode.
❿ **VTR CANCEL/C. RESET button**
This is a dual-function button.
- Cancels the programmed data held in the VCR's timer memory in the Timer Set mode.
- Resets the CTL time counter reading to "0H 00M 00S".

⓫ **Multi-purpose numeric keys**
LCD clock setting: ☞ p.16
LCD timer programming: ☞ p.27
Go-To function: ☞ p.22
Index Search: ☞ p.21
⓬ **DISPLAY button**
Switches the VCR's display between the Counter and Clock modes. Also changes the LCD display from the Timer Set mode to the Clock mode.
⓭ **C. MEMORY button**
Counter Memory button.
⓮ **CURSOR (⊢—/—⊣) buttons**
When setting the LCD timer, use these buttons to move the cursor for data entry.
⓯ **INDEX button**
Engages the Index Search mode. (☞ p.21)
⓰ **ERASE button**
Press during playback to erase an index code. (☞ p.21)
⓱ **MARK button**
Press during playback or recording to put an index code onto the tape. (☞ p.21)
⓲ **GO-TO button**
Engages the Go-To mode. (☞ p.22)
⓳ **INTRO button**
Engages the Intro Search mode. (☞ p.22)



⑳ **DUET EDITING MODE, STAND-BY and START buttons**
Use these buttons for simultaneous control of two JVC decks in editing. (☞ p.23)

㉑ **TV/VIDEO button**
Switches the RF output between the video signal and the aerial signal (when an aerial is connected to the TV through the VCR).

㉒ **<</>> (Variable Search) buttons**
For forward or reverse visual search at various speeds. (☞ p.19)

㉓ **II (PAUSE/STILL) button**

㉔ **◄◄/►► (REW/FF,Shuttle Search) buttons**

㉕ **►/X2 (PLAY/Double Speed) button**

㉖ **● (REC) button**
Starts recording when pressed together with the PLAY button.

㉗ **■ (STOP) button**

㉘ **SKIP SEARCH button**
- Automatically advances at high speed through a 30-second tape segment when pressed in the Play mode. ☞ p.19

㉙ **TV PROG. buttons (∨/∧)**
Adjusts tracking of slow-motion pictures and V. Lock of still pictures. They have no effect on TV channel selection.

㉚ **EJECT button**

㉛ **OPERATE button**
Turns the VCR power ON or OFF. To engage the VCR Lock function, keep this button pressed for 2 seconds after turning the power off.

TV Operation buttons (designated TV models only)

㉜ **TV PROG. buttons (∨/∧)**
For TV receiver channel selection.

㉝ **VOLUME buttons (–/+)**
Adjusts the TV's sound volume.

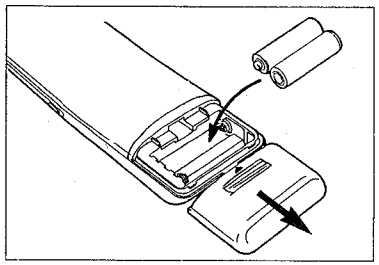
㉞ **OPERATE button**

㉟ **MONITOR (TV/VIDEO) button**
Selects the TV's operating mode.
TV: To view broadcast programmes or tape programmes via RF OUT connection.
VIDEO: To view programmes via AV connection.

Installing the batteries

- Insert two "R6/AA/UM-3"-size batteries (provided).

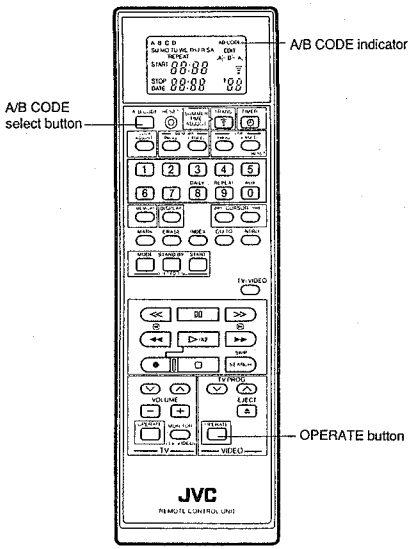
NOTES:
- Do not mix new and old batteries.
- Do not mix different types of battery.



A/B CODE SWITCHING

This VCR is initially set to respond to "A" code signals. Before operating the VCR, check that "A CODE" is displayed in the upper right hand corner of the LCD. If you have two JVC VCRs and want to prevent them from responding simultaneously to a single remote control, you can set this VCR to respond to "B" code signals. You will then be able to operate both VCRs with a single remote control.

1. Unplug the VCR's power cord.
   - VCR's code memory is cleared.
2. Press the A/B CODE select button to engage the "B" mode; "B CODE" will appear on the LCD.
3. Plug the VCR in again.
4. Press the remote control's OPERATE button.
   - The VCR turns on. From now on it will respond only to "B" code signals.

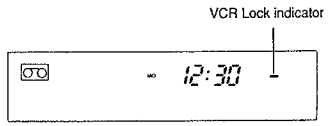


VCR LOCK FUNCTION

This function helps prevent any accidental or unauthorised operation. When the VCR Lock mode is engaged, all operation buttons on the recorder are disabled. Operation is not possible unless the remote control is used.

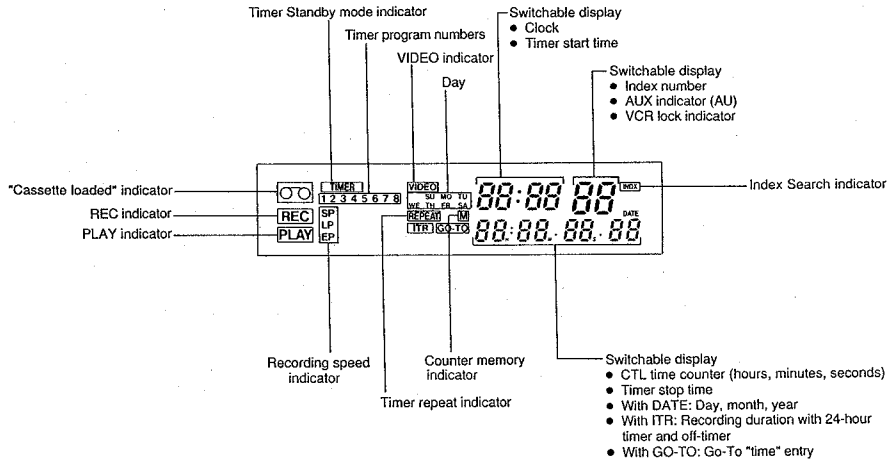
- Press the remote control's OPERATE button to turn the power off.
- Keep the OPERATE button pressed for an additional 2 seconds after the power LED indicator has gone off.
- The VCR Lock indicator (–) will appear on the display panel.
- To disengage this mode, press the remote control's OPERATE button to turn the power on. Pressing the TIMER button during timer recording also disengages this mode.

NOTES:
- While in the VCR Lock mode, the VCR can receive timer programmed data from the remote control.
- Timer recording is also possible. After completion of timer recording, the VCR returns to the VCR Lock mode (even after automatic cassette ejection at tape end).
- A cassette may be inserted while the recorder is in the VCR Lock mode. After the cassette has been inserted, the VCR Lock mode is re-engaged.

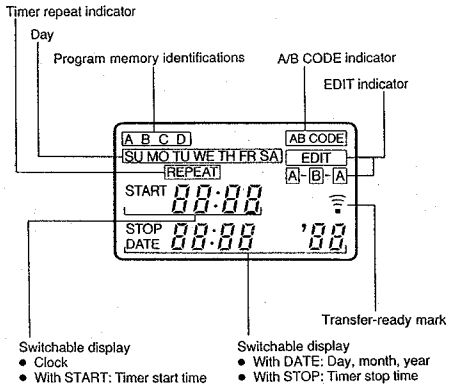


DISPLAYS

DISPLAY PANEL

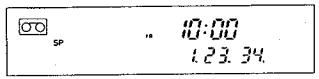


LCD (Liquid Crystal Display) PANEL

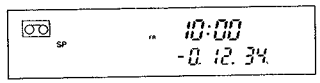


CTL TIME COUNTER

- Time counting is based on the recorded control signal. The counter does not function with non-recorded tape segments.
- Press COUNTER RESET to reset the counter to "00.00.00".
- The counter reading shows elapsed time from the "zero" position.



Forward direction



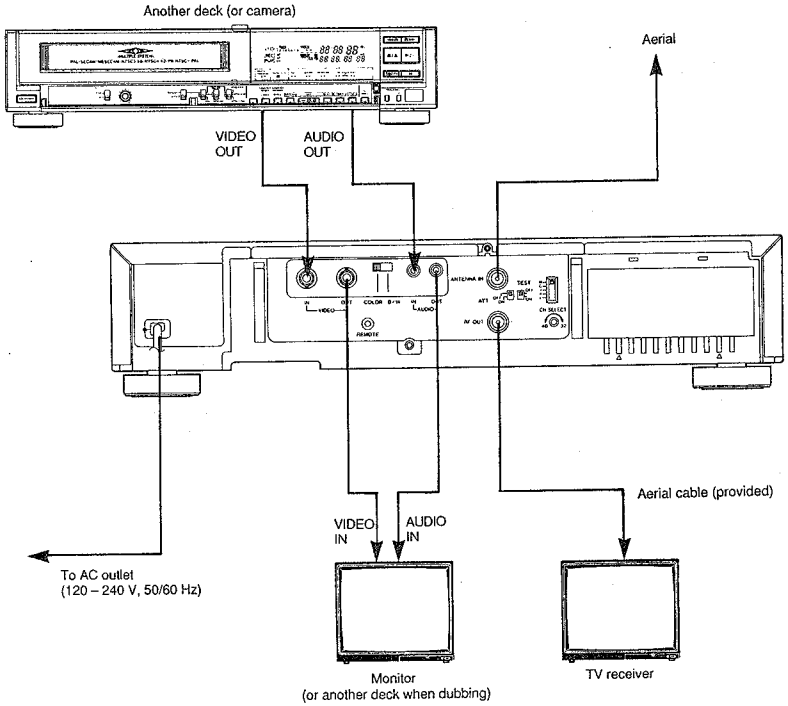
Reverse direction

NOTES:

- When a PAL/SECAM tape is rewound or fast-forwarded after NTSC tape playback (or vice-versa), the CTL time counter readout will be inconsistent. To stabilize the readout, first play back the tape at normal speed, then engage FF or REW.

CONNECTIONS & SYSTEM SETUP

CONNECTIONS



NOTE:

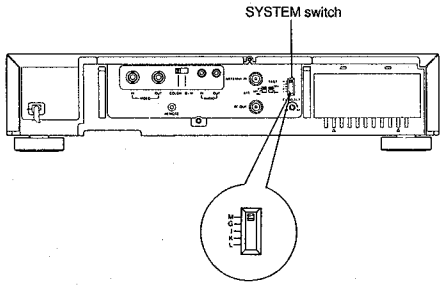
- If necessary, use an appropriate plug adapter to match the type of AC wall outlet.

RF CONVERTER SWITCH SETTING

When using an RF connection, you must set the rear panel SYSTEM switch to correspond to your TV system.

M: Set to this position when using an NTSC-M (USA, Canada, Mexico, Japan, etc.) TV.
G: Set to this position when using a PAL-B/G (Germany, Austria, Italy, Scandinavia, etc.) or SECAM B/G (Saudi Arabia, Lebanon, Egypt, etc.) TV.
I: Set to this position when using a PAL-I (UK, Hongkong) TV.
K: Set to this position when using a PAL-D/K (China, Mongolia) or SECAM-D/K (Russia, Poland, Rumania, etc.) TV.
L: Set to this position when using a SECAM-L (France) TV.

NOTE:
- If no colours appear on the screen when using a multi-system TV set to AUTO, reset its system select switch to correspond to the SR-330MS's RF converter system switch setting.



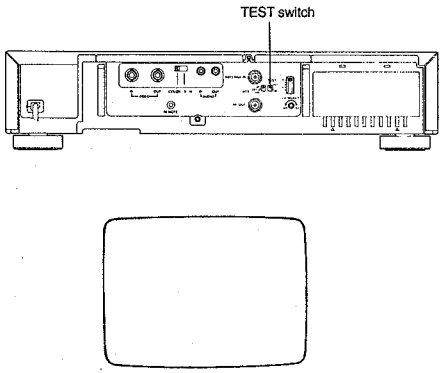
VIDEO CHANNEL SETTING

When using an RF connection, you must fine-adjust your TV to the VCR's RF output frequency.

1. Turn on the recorder.
2. Set the TEST switch to ON.
3. Set your TV to UHF channel 36* according to the European channel system.
   - Fine-adjust the TV until the two vertical white bars are as sharp and clear as possible.
4. Reset the TEST switch to OFF.

* UHF channel 34 in the USA.
UHF channel 33 in Japan.

NOTES:
- You can also use a prerecorded VHS video cassette when fine tuning the TV. Adjust the TV until the clearest pictures and sound are obtained.
- If broadcasts on neighbouring channels cause interference, the RF converter output frequency must be set to a different channel. Available channels are UHF channels E 32 to 40 (29 to 39 according to the U.S. channel system and 28 to 38 to the Japanese channel system.). For more information, consult your JVC dealer.
- When using an RF connection, your TV must be set to the correct video channel.

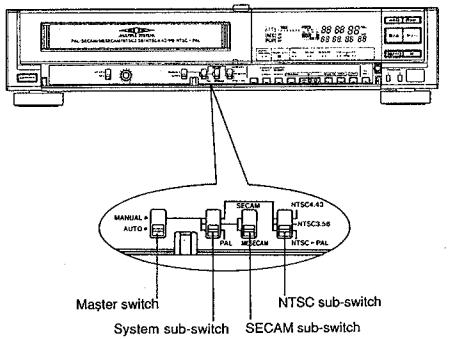


COLOUR SYSTEM SETTING

This recorder incorporates the necessary circuitry for recording or playing back PAL, SECAM, and NTSC signals (via an appropriate monitor). Additional circuitry allows you to view an NTSC tape on a PAL monitor.

Automatic Colour System Selection
1. Set the Master switch to AUTO.
   - The recorder automatically detects the type of input or playback signal and switches to the corresponding mode.
2. Set the SECAM sub-switch as required for recording.
   SECAM: To record an input SECAM or MESECAM signal in the SECAM mode.
   MESECAM: To record an input SECAM or MESECAM signal in the MESECAM mode (for playback on PAL TVs).
3. Set the NTSC sub-switch as required in playback.
   NTSC 3.58: To view an NTSC tape on an NTSC 3.58 monitor.
   NTSC 4.43: To view an NTSC tape on an NTSC 4.43 monitor.
   NTSC ► PAL: To view an NTSC tape on a PAL monitor.
4. Proceed with recording or playback.
   - The corresponding colour system indicator will light.
   - With inferior quality tapes, system detection may not be possible and the colour system indicators will light erratically. In this case, perform manual colour system selection (see below).

Manual Colour System Selection
1. Set the Master switch to MANUAL.
2. Select the desired colour system with the System sub-switch.
   Up: NTSC
   Middle: SECAM/MESECAM
   Down: PAL
3. Set the SECAM sub-switch as required for recording.
   SECAM: To record an input SECAM or MESECAM signal in the SECAM mode.
   MESECAM: To record an input SECAM or MESECAM signal in the MESECAM mode (for playback on PAL TVs).
4. Set the NTSC sub-switch as required in playback.
   NTSC 3.58: To view an NTSC tape on an NTSC 3.58 monitor.
   NTSC 4.43: To view an NTSC tape on an NTSC 4.43 monitor.
   NTSC ► PAL: To view an NTSC tape on a PAL monitor.
5. Proceed with recording or playback.

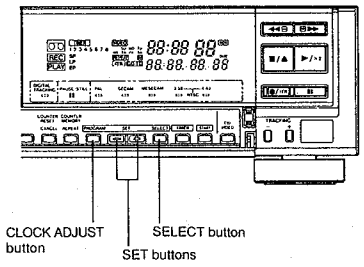


NOTES:
- When viewing NTSC tapes on a PAL monitor:
  - The playback picture may shrink vertically with black bars appearing on the top and bottom of the screen. This is not a malfunction of either the recorder or the TV.
  - The picture may not be in colour during search, still or slow-motion playback.
  - The picture may roll up or down. This can be corrected, using the monitor's V-HOLD control.
- Recording from NTSC to PAL is not possible.
- When the Master switch is set to MANUAL, be sure that the System sub-switch setting corresponds to the colour system of the input or playback signal. Recording or playback will not be performed correctly otherwise.

CLOCK SETTING

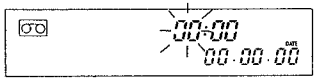
The SR-330MS has two independent clocks; one in the VCR and the other in the remote control. You can set the VCR clock either directly or by transferring clock data from the remote control. Timer operation is not possible if the clock has not been set.

BUILT-IN CLOCK

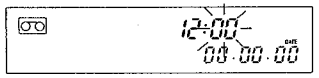


- Turn on the VCR.

1. Press CLOCK ADJUST until the Clock Set mode is engaged.
   - The hour indication will blink.

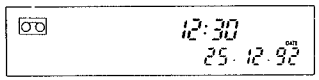


2. Enter the hour with either SET button, and press SELECT.

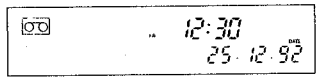


3. Enter the minutes with either SET button, and press SELECT.

4. Enter the day, month, and year in the same way.
   - In year setting, set only the last two digits of the year.



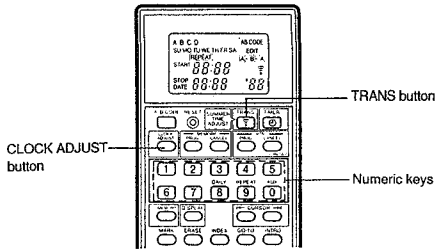
5. Press CLOCK ADJUST to end clock setting.
   - Time-keeping starts.
   - The day-of-the-week indication is automatically displayed.



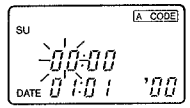
Power failure indicator
- A blinking "0:00" indicates power failure. Set the clock.
- Clock/timer backup time is about 3 minutes.

LCD CLOCK

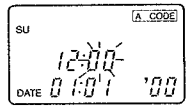
The LCD clock is independent of the VCR's clock. You can set the VCR's clock via remote control using the remote control unit's transfer function.

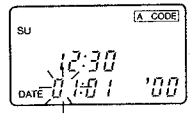


1. Press CLOCK ADJUST.
   - The hour indication will blink.

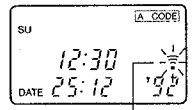


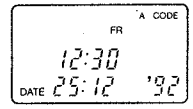
2. Enter the hour with numeric keys.
   - Always key in two digits. For a one-digit number, key in "0" first.
3. Enter the minutes with numeric keys.
4. Enter the day, month and year in the same way.
   - In year setting, set only the last two digits of the year.
   - After setting the year, the transfer-ready mark will appear and blink.





5. Press CLOCK ADJUST to end clock setting.
   - Time-keeping starts.
   - The day-of-the-week indication is automatically displayed.
   - To transfer the clock data to the VCR, press TRANS instead of CLOCK ADJUST.
   - If the transfer-ready mark disappears before transmission, press CLOCK ADJUST, then press TRANS while the transfer-ready mark is blinking; otherwise, the TRANS button will function as the SUMMER TIME ADJUST button.
   - To readjust the clock, press CLOCK ADJUST and then press either CURSOR button until the figure requiring correction blinks.

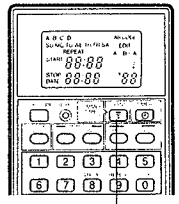


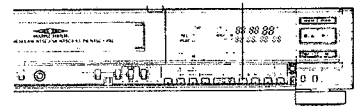


SUMMER TIME ADJUST

This convenient feature allows you to quickly make the annual clock adjustment to the "summer time" (daylight saving time) setting, and back again to normal time.

1. Press and quickly release the SUMMER TIME ADJUST button while in the Clock Set mode (for VCR's clock), or while in the Clock mode (for remote control's clock).
   - The clock will be set forward by one hour.
2. To switch back to regular time, hold the SUMMER TIME ADJUST button pressed for 2 seconds.
   - The clock will be set back by one hour.

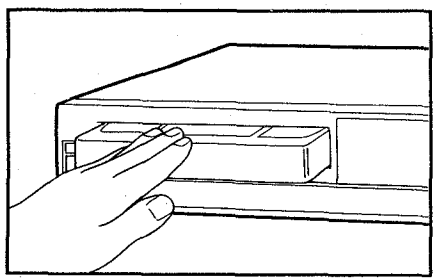




HANDLING VIDEO CASSETTES

LOADING

1. Insert a cassette with its label side facing you.
   - VCR power will come on automatically.



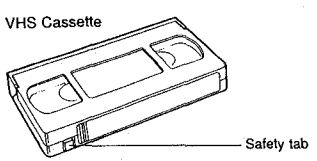
UNLOADING

1. Press (STOP/EJECT) while in the Stop mode.
   - Even when the VCR power is off, simply press the (STOP/EJECT) button to unload a cassette.
   - If the cassette will not eject, check to see if "TIMER" is displayed on the display panel. If it is, press the TIMER button to turn off the Timer Standby mode.

WARNING
- Do not insert fingers or foreign objects into the cassette loading slot as this may result in personal injury or damage to the mechanism.
- Do not try to remove the cassette once automatic loading has started.

ACCIDENTAL ERASURE PREVENTION

- To prevent accidental recording on a recorded cassette, remove its safety tab.
- To record on it later, cover the hole with adhesive tape.



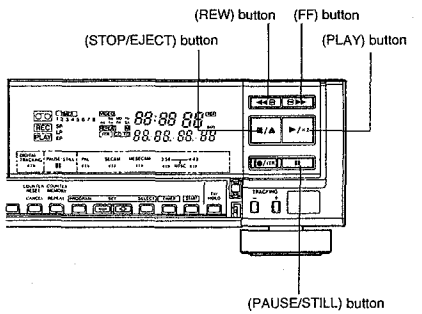
PLAYBACK

Confirm the settings of the colour system select switches. ☞ p.14.

BASIC PROCEDURE

1. Load a cassette.
   - If the safety tab on the cassette is removed, playback starts automatically.
2. Press (PLAY) once to start playback.
3. Press (STOP/EJECT) to stop playback.

NOTES:
- Tape speed selection is automatic.
- The VCR automatically rewinds when the tape reaches the end of the tape.



REWIND AND FAST-FORWARD

- Press (REW) or (FF) while in the Stop mode.
- Press (STOP/EJECT) to stop rewind or fast-forward.

NOTES:
- When a PAL/SECAM tape is rewound or fast-forwarded after NTSC tape playback (or vice-versa), the CTL time counter readout will be inconsistent. To stabilize the readout, first play back the tape at normal speed, then engage FF or REW.

DOUBLE-SPEED PLAYBACK

- Press (PLAY) while in the Play mode to engage the Double-Speed mode.
- Press (PLAY) to resume normal playback.

STILL AND FRAME ADVANCE

- Press (PAUSE/STILL) to view a still picture.
- Press (PAUSE/STILL) while in the Still mode to advance the picture frame by frame.
- Press (PLAY) to resume normal playback.

NOTES:
- To protect the tape, the Still mode is automatically cancelled after about 5 minutes.

SHUTTLE SEARCH

- Press (REW) while in the Play mode for high-speed reverse search at 9 times (PAL/SECAM/MESECAM) or 7 times (NTSC) normal speed.
- Press (FF) while in the Play mode for high-speed forward search at 9 times (PAL/SECAM/MESECAM) or 7 times (NTSC) normal speed.
- Press (PLAY) to resume normal playback.

NOTES:
- For brief searching, hold (REW) or (FF) depressed; releasing the button resumes normal playback.

VARIABLE-SPEED SEARCH

The variable search buttons (on the remote control) control both the direction and speed of tape search, making possible fast- and slow-motion playback in either forward or reverse direction from the Still or Play mode.

- To increase speed while in the forward direction, press >> repeatedly; to decrease, press << repeatedly. The direction reverses after leaving the Still mode.
- To increase speed while in the reverse direction, press << repeatedly; to decrease, press >> repeatedly. The direction reverses after leaving the Still mode.
- To resume normal playback, press (PLAY).

SKIP SEARCH

You can skip over unwanted segments during playback.

- Press SKIP SEARCH (on the remote control). The VCR will fast-motion through from 30 seconds to 2 minutes of tape depending on how many times the button is pressed (up to 4 times).
- Playback resumes automatically.
- Press (PLAY) to cancel the Skip mode midway.

TRACKING CONTROL

This VCR is equipped with automatic Digital Tracking to ensure the best possible picture quality.

- When playback starts, tracking is automatically adjusted.
- The DIGITAL TRACKING indicator blinks while adjusting and remains lit after completion of adjustment.
- Automatic tracking is effective only during normal playback.

If you wish to adjust tracking manually, you can override this function.

1. Press TRACKING "–" and "+" simultaneously to cancel the Auto Tracking mode.
   - The DIGITAL TRACKING indicator turns off.
2. Adjust tracking by pressing TRACKING "–" or "+" to minimise noise bars.

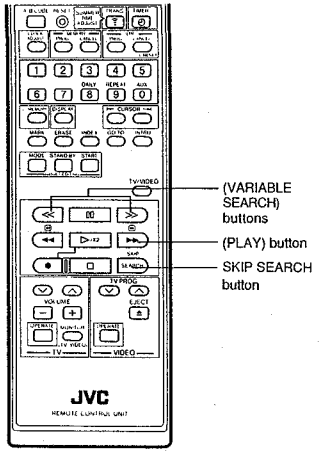
NOTES:

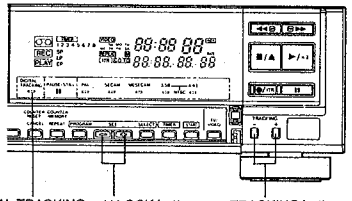
- When a new cassette is inserted, Auto Tracking resumes automatically.
- To manually return to the Auto Tracking mode, press both TRACKING buttons simultaneously.

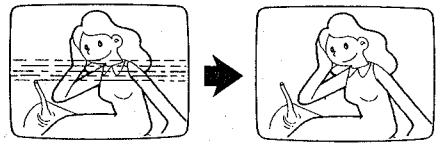
Tracking Adjustment In Double-Speed, Slow, or Still Playback

The DIGITAL TRACKING indicator turns off when a mode other than normal playback is entered.

- To adjust tracking during double-speed or slow-motion playback, simply press either TRACKING button to minimise noise bars.
- To adjust tracking during still playback, press (PAUSE/STILL) a few more times to minimise noise bars.







V.LOCK ADJUSTMENT

Vertical jitter in still pictures can be corrected with the V.LOCK buttons.

- Press either V.LOCK button to minimise jitter.

TAPE ACCESS

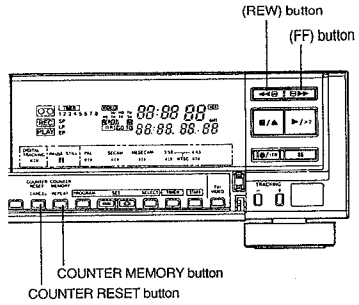
COUNTER MEMORY

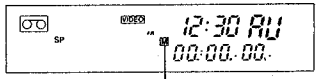
Allows you to automatically locate a specific tape position in rewind or fast-forward. Useful when you wish to re-view the same tape segment or view the segment you have just recorded.

1. Press COUNTER RESET at the position you wish to locate later.
   - The counter resets to "zero".
2. Press COUNTER MEMORY.
   - "M" appears on the display panel.
3. When you wish to return to the zero-marked position, stop the tape and press (REW) or (FF).
   - The tape will stop at counter "zero" (an error of a few seconds can be expected).
   - Automatic start of playback is possible when combined with Next-Function Memory (see below).

NOTES:

- Once you have used the Counter Memory function, cancel it by pressing COUNTER MEMORY ("M" disappears), otherwise the tape will always stop at counter "zero" in rewind or fast-forward.





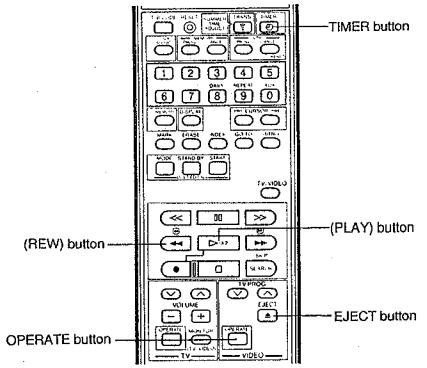
NEXT-FUNCTION MEMORY

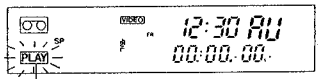
You can specify the mode you want to enter after rewind (Play, Timer Standby, Eject or Power Off) immediately after pressing the (REW) button.

1. Press (REW) while in the Stop mode.
2. Press the corresponding button ((PLAY), TIMER, EJECT or OPERATE) within 2 seconds.
   - At completion of rewind, the selected mode is entered automatically.
   - If used with the Counter Memory function (see above), the selected mode will be entered at counter "zero" rather than at the beginning of the tape.
   - During rewind, the corresponding indicator (PLAY, TIMER, "Cassette loaded" indicator, or OPERATE button's LED) blinks. Timer indicator also lights during rewind for Timer Standby Memory.
   - To cancel the memory during rewind, press (STOP) for Play Memory, EJECT for Eject Memory, TIMER for Timer Standby Memory, or POWER for Power Off Memory.

NOTE:

- Next-Function Memory (except Eject Memory) is also possible via the VCR's controls.





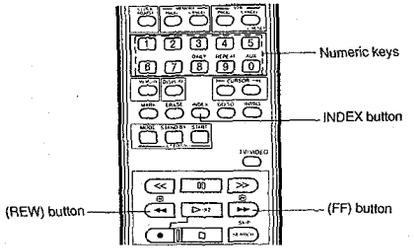
INDEX SEARCH

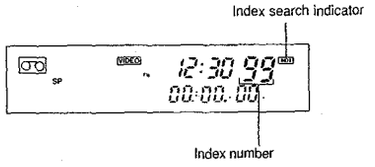
This function gives you quick access to any one of up to 99 index codes in either direction. The recorder automatically marks index codes at the beginning of each recording.

1. Press INDEX in the Play or Stop mode. "INDX" appears on the display panel.
2. Specify the index number using the numeric keys within 10 seconds. The specified number appears on the display panel.
3. Press (REW) or (FF). Index Search will start in the corresponding direction.
   - The index numbers are counted down to 0, then normal playback starts.
   - If the INDEX button was pressed in the Play mode, the screen will show search pictures; if the button was pressed in the Stop mode, then the index codes are detected in the Rewind or Fast-Forward mode.

NOTES:

- To cancel Index Search, press STOP.
- If the desired index code marks the beginning of the current or next programme, skip step 2 and just press the (REW) or (FF) button.
- When a PAL/SECAM tape is rewound or fast-forwarded after NTSC tape playback (or vice-versa), the CTL time counter readout will be inconsistent. To stabilize the readout, first play back the tape at normal speed, then engage FF or REW.





INDEX MARK/ERASE

Index codes can also be added or deleted manually.

To Mark

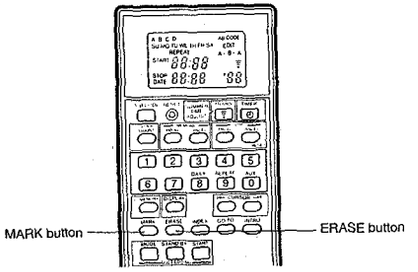
1. Press MARK while in the Play or Record mode. The recorder will mark an index code at that position.
   - "INDX" will blink on the display panel during Mark.

To Erase

1. Press ERASE while in the Play or Still mode. The recorder will search for the nearest index code and delete it.
   - "INDX" will light on the display panel during search and blink during erasing process.

NOTES:

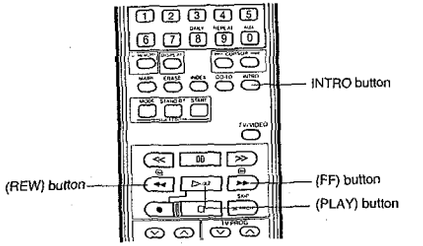
- Index codes cannot be added or erased if the safety tab has been removed from the cassette.
- Adding or erasing index codes in the vicinity of switching points between SP and EP/LP recordings may cause picture distortion.



INTRO SEARCH

This function lets you visually check the beginning of each index-marked programme in fast-motion. Convenient for checking programme contents.

1. Press INTRO while in the Play or Stop mode.
   - The INDX indicator on the display panel will light.
2. Press (REW) or (FF) within 2 seconds.
   - Each time an index code is detected, the initial 5-second section is played back in fast-motion.
3. When you find the section you want to view, simply press (PLAY).



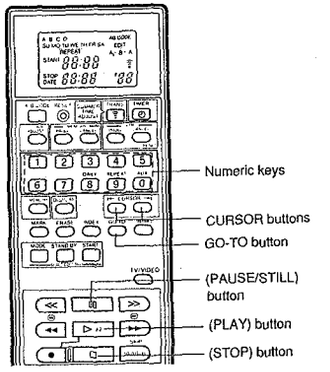
GO-TO

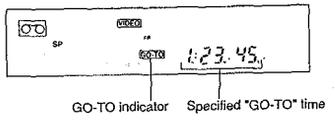
This function gives you direct access to any point on the tape by simply specifying the time from the current position or the beginning of the tape.

1. Press GO-TO while in the Play, Still or Stop mode.
   - The counter will change to Go-To mode.
2. If you wish to specify the time from the current tape position, first press either CURSOR button to specify the direction, then input the time using the numeric keys.
   If you wish to specify the time from the beginning of the tape, simply input the time using the numeric keys.
3. Press (PLAY) or (STOP) (or (PAUSE/STILL) if you have pressed GO-TO while in the Play or Still mode).
4. After the specified point is reached, the VCR will automatically enter the designated mode (Play, Stop, or Still).

NOTES:

- Each step in the procedure must be followed by the next within 60 seconds.
- If the specified time exceeds the tape length, the tape fast-forwards to the end and then rewinds to the beginning.
- When a PAL/SECAM tape is rewound or fast-forwarded after NTSC tape playback (or vice-versa), the CTL time counter readout will be inconsistent. To stabilize the readout, first play back the tape at normal speed, then engage FF or REW.





RECORDING

BASIC PROCEDURE

- Connect necessary components correctly. ☞ p.12
- Confirm the signal system of the external source being used and set the colour system select switches accordingly.
- To monitor via RF connection, press the TV/VIDEO button to engage the Video mode.

1. Load a cassette with safety tab in place.
2. Select the recording speed (SP/EP/LP).
3. Press (REC) and (PLAY).
4. To temporarily stop recording, press (PAUSE/STILL).
   - A white horizontal bar appears on the screen which shrinks in 4 stages as pause time elapses. When the last quarter starts blinking and disappears (after about 5 minutes), the recorder automatically enters the Stop mode.
5. To re-start recording, press (PLAY).
6. To end recording, press (STOP/EJECT).

NOTES:

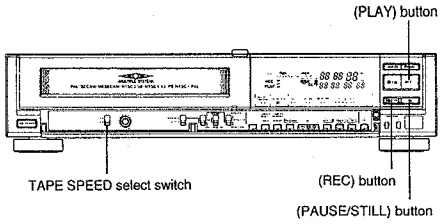
- An index code is recorded when recording starts. Do not press any buttons while "INDX" is blinking on the display panel.
- The VCR automatically rewinds when the end of the tape is reached.

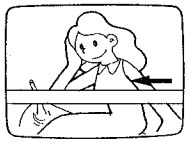
SIMULTANEOUS CONTROL OF TWO RECORDERS IN EDITING

This feature simplifies editing/dubbing by making it possible for you to simultaneously deliver separate commands to two JVC recorders via a single remote control.

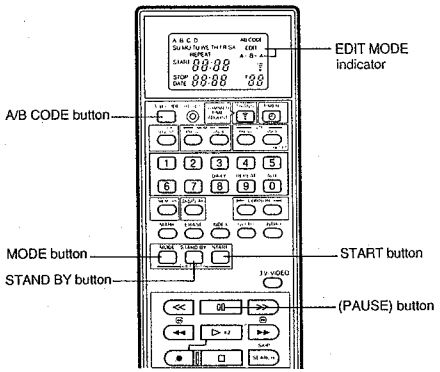
- Make all necessary preparations for recording.
- Be sure that one unit is set to respond to A code signals and the other to B code signals. (☞ p.10)
- Be sure the remote control's clock has been set. Otherwise, this type of editing is not possible.

1. Press the MODE button in the DUET EDITING section on the remote control.
   - "EDIT Ⓐ → Ⓑ" appears on the LCD. To edit from B to A, press the A/B CODE button; "EDIT Ⓑ → Ⓐ" appears.
2. Press STAND BY.
   - The player enters the Still mode.
   - The recorder enters the Record-Pause mode.
3. Locate the edit-IN point on the source tape.
   - In this state, only the player responds to the remote control's commands.
4. Press ❚❚ to fix the IN point.
5. Press START.
   - The player enters the Play mode.
   - The recorder enters the Record mode.
6. Press ❚❚.
   - The player enters the Still mode.
   - The recorder enters the Record-Pause mode.
7. To continue editing, repeat steps 3 — 6.
8. To end editing, press MODE until the EDIT indication disappears.





PAUSE MODE indicator



NOTES

- Due to the automatic backspacing system, it takes a few seconds before the recorder actually starts recording after the START button is pressed. The player, however, immediately starts playback from the specified IN point. For more accurate editing and a stable edited picture, we recommend that you specify a point slightly before the intended IN point.

INSTANT TIMER RECORDING (OFF-TIMER)

You can set the VCR to automatically stop recording and shut off after a specified time-span.

1. Press (REC) while in the Record mode to activate the off-timer.
   - "ITR" blinks on the display panel. Recording duration is set at "0:30" (30 minutes).
   - The off-time can be delayed in 30-minute increments (up to 4 hours) by pressing (REC).
   - If the end of the tape is reached during recording, the cassette is ejected and power turned off.

NOTES:

- Instant timer recording has priority over programmable timer recording. Be sure that the preset times do not overlap.

24-HOUR TIMER RECORDING

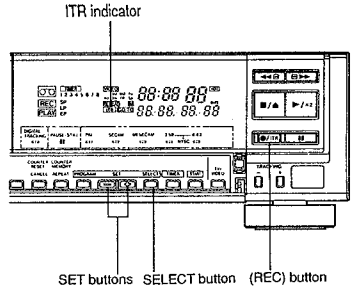
You can set the VCR to start recording at any time within the next 24 hours and stop automatically after a specified duration of time.

- Prepare connected components as necessary.

1. Press START to enter the 24-hour timer set mode.
   - "ITR" appears on the display panel.
2. Press START to delay the start time in 30-minute increments.
   - More precise time setting is possible later using the SELECT/SET buttons.
3. Press (REC) to set the recording duration.
   - "0:30" (30 minutes) appears first and can be delayed in 30-minute increments (up to 4 hours) by pressing (REC).
4. Press OPERATE to turn the power off (within 5 seconds).
   - "ITR" remains lit.
   - If "ITR" blinks, turn the power on and check the data.
   - If "ITR" and the "cassette loaded" indicator blink, the loaded cassette does not have a safety tab. Change the cassette or reseal the slot. ☞ p.17

NOTES:

- To cancel the Instant Timer Set mode, press the CANCEL button twice.
- If the end of the tape is reached during recording, the cassette is ejected and power turned off.
- 24-Hour timer recording has priority over programmable timer recording. Be sure that the preset times do not overlap.

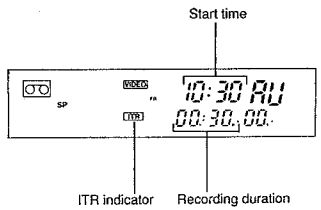


Off-Time Setting In 1-Minute Increments

Once the off-timer has been activated, the off-time can be set more precisely (up to 8 hours, 59 minutes).

After step 1:

2. Press SELECT.
3. Press SET to set the hour, and press SELECT.
4. Press SET to set the minute, and press SELECT.
   - Make entries within 10 seconds at each step.



More Precise Time Setting In 1-Minute Increments

Once start time and recording duration have been set, more precise adjustment is possible.

After step 3:

4. Press SELECT until the digits you want to change blink.
5. Press SET to correct the data, and press SELECT.
6. Repeat steps 4 and 5 as required, and press SELECT.
   - Make entries within 10 seconds at each step.
   - Recording duration can be set for up to 8 hours, 59 minutes.

PROGRAMMABLE TIMER RECORDING

TIMER RECORDING PROCEDURE

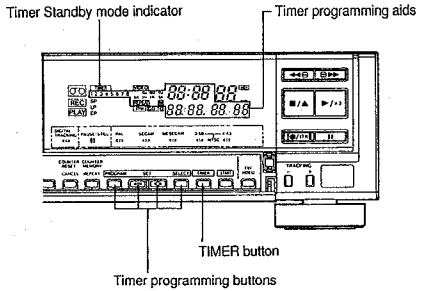
Unattended start and stop of recording is possible using the 1-year/8-event programmable timer.

- Make necessary preparations for connected components.

1. Load a cassette with safety tab in place.
2. Program the timer either with the VCR's SET and SELECT buttons or the remote control.
   Two methods of timer programming are available:
   - Local programming: Program the timer with the recorder's controls while referring to the display panel.
   - Independent remote programming: Program the remote control's memory using the remote control's keys while referring to the LCD. Programmed data can then be transferred to the recorder.
   Refer to relevant sections below.
3. Press the TIMER button to enter the Timer Standby mode.
   - "TIMER" and program number(s) appear on the display panel.
   - Recording will start at the preset time, and stop at the preset time.
   - If the end of the tape is reached during recording, the cassette is ejected and power turned off.

NOTES:

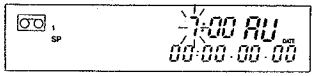
- If you need to use the VCR while it is in the Timer Standby mode, press TIMER and then OPERATE. After using the VCR, be sure to press TIMER to engage the Timer Standby mode.



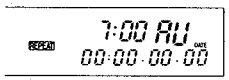
LOCAL PROGRAMMING

1. Press PROGRAM.
   - The display changes to the Timer Set mode with program 1 blinking.
   - To advance to another program, select a program number with SET.
2. Press SELECT.

3. Enter the start time with SET and SELECT.
   - Select the item to be set with SELECT
   - Set the desired data with either SET –/+.
   - For weekly setting, press REPEAT once.
   - For daily setting, press REPEAT twice.



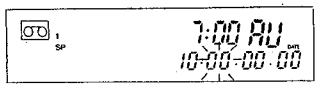
Blinking item is ready to be set.



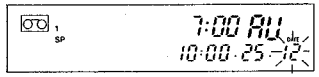
Weekly setting

Daily setting

4. Enter the stop time with SET and SELECT.

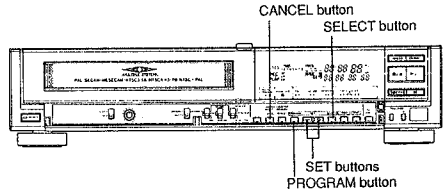


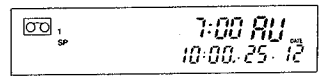
5. Enter the date with SET and SELECT.
   - For daily setting starting on the day of setting, there is no need to enter any date figure.
6. Press PROGRAM to end programming.
   - Check that the recording speed is set correctly. Use the TAPE SPEED switch to change the setting if necessary.
   - To immediately engage the Timer Standby mode, press TIMER.



Checking timer data

1. Press PROGRAM.
   - Timer data for program 1 appears on the display panel.
   - To advance to another program, select a program number with SET.
2. Press SET to successively display timer data in order of program number.
3. Check the data.
   - To return to the Clock mode, press PROGRAM. The Clock mode is returned to automatically if no action is taken for 60 seconds.





Cancelling timer data

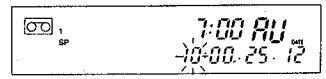
- Cancel the Timer Standby mode.

1. Press PROGRAM.
   - Timer data for program 1 appears on the display panel.
2. Press SET to select the program you wish to cancel.
3. Press CANCEL.
   - Programmed data is cleared from memory.

Correcting timer data

After step 1:

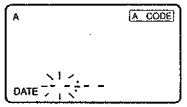
2. Select the program number you wish to correct with SET.
3. Press SELECT to move to the item to be corrected and enter new data with SET.



REMOTE PROGRAMMING

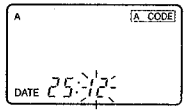
- The remote control can store 4 programs (A, B, C and D) in memory.
- Programmed data is retained in memory even after it has been transferred to the recorder.

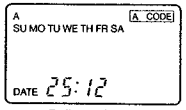
1. Press MEMORY PROG.
   - The LCD is ready for program "A" data entry.
   - Press MEMORY PROG. again to advance to another program.



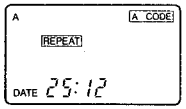
Blinking item is ready to be set.

2. Enter the date with the numeric keys.
   - For daily setting, press [8] (DAILY) and enter the start date. If recording is to take place the same day, press CURSOR → without entering any date figure.
   - For weekly setting, press [9] (REPEAT) and enter the start date.



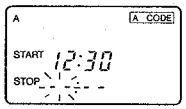


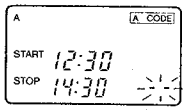
Daily setting



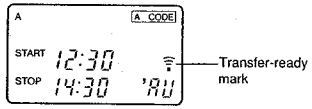
Weekly setting

3. Enter the start time with the numeric keys.
   - Always key in two-digit numbers for the hours and minutes, eg. 09:05.
4. Enter the stop time with the numeric keys.





5. Press [0] (AUX).
   - The transfer-ready mark will appear and blink.
6. Point the remote control at the VCR's Remote Sensor window and press TRANS.
   - The programmed data will be loaded into the lowest available VCR program memory (1–8).
   - If all programs are full, the VCR's clock will blink and transmission will not take place. In this case, press VTR PROG. to select a programme(s) for cancellation, and then press VTR CANCEL to cancel it. After cancelling a program, press TRANS again to transfer data.
   - Check that the recording speed is set correctly. Use the VCR's TAPE SPEED switch to change the setting if necessary.
   - To engage the Timer Standby mode, press TIMER.



Checking LCD timer data

1. Press MEMORY PROG.
2. Programmed data will appear on the LCD with the transfer-ready mark blinking. Press MEMORY PROG. to successively display timer data for programs A, B, C and D.
3. Check the data.
4. To return to the Clock mode, press DISPLAY.
   - The Clock mode is also returned to when MEMORY PROG. is pressed while program D is displayed.

Cancelling LCD timer data

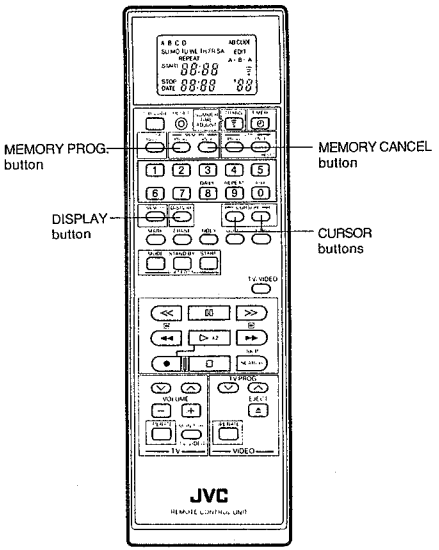
1. Press MEMORY PROG.
2. Select the program memory you wish to cancel with MEMORY PROG.
   - The transfer-ready mark will be blinking.
3. Press MEMORY CANCEL.
   - Programmed data is cleared from memory.
4. To return to the Clock mode, press DISPLAY.

Correcting LCD timer data

1. Press MEMORY PROG.
2. Select the program memory you wish to correct with MEMORY PROG.
   - The transfer-ready mark will be blinking.
3. Press either CURSOR button until the position which requires correction blinks. Enter new data with numeric keys.
4. To return to the Clock mode, press DISPLAY.

NOTES:

- Timer programming is not possible unless the clock has been previously set.
- The stop time must be set within 24 hours of the start time.
- Invalid date and time data will be rejected.
- Tape speed in timer recording is determined by the VCR's TAPE SPEED switch setting.



TROUBLESHOOTING GUIDE

POWER AND TAPE TRANSPORT PROBLEMS

Symptoms	Check points
Clock is functioning normally, but the VCR power cannot be turned on.	• Is "TIMER" displayed on the display panel? — Press the TIMER button to cancel the Timer-Standby mode. • Is the VCR Lock function activated? — Use the remote control to turn the power on.
Tape stops during rewind or fast-forward.	• Has the COUNTER MEMORY button been pressed? — Press again to cancel the counter memory.

RECORDING PROBLEMS

Symptoms	Check points
Recording will not start.	• Is the cassette loaded? • Has the cassette's safety tab been removed? — Reseal the slot with adhesive tape.
Timer recording is not possible.	• Have you set the clock and programmed the timer correctly? — Check again. • Is "TIMER" displayed on the display panel? — If not, press the TIMER button to display "TIMER".

PLAYBACK PROBLEMS

Symptoms	Check points
Tape is running but there is no playback picture.	• Is the monitor's input select switch set correctly? • If you are using a TV receiver via AV connection, is it set to the "AV" mode? — If not, set it to the "AV" mode. • If you are using a TV receiver via RF connection, is it set to the correct video channel? — If not, set it correctly.
Picture with no sound, sound with no picture, picture with no colour, etc.	• If you are using a TV receiver via RF connection, is the system select switch set to the appropriate position? — Set to M, G, I, L or K depending on the system of your TV receiver. (☞ p.14)
Noise and jitter problems.	• Refer to "TRACKING CONTROL" and "V.LOCK ADJUSTMENT". (☞ p.19).

OTHERS

Symptoms	Check points
Timer setting is not possible.	• Has the clock been set? — Set the clock.
Index Search does not function.	• Adjacent index codes may be too close to each other. — Erase some index codes and mark new ones, if necessary, with sufficient distance between two index codes.
Remote control does not function.	• Are the batteries depleted? — Replace with new ones. • If it is not a battery problem, check the A/B code setting on the remote control. (☞ p.10)

SPECIFICATIONS

GENERAL

Power requirement	:	AC 120 — 240 V ∿, 50/60 Hz
Power consumption	:	24 W
Temperature		
Operating	:	5°C to 40°C
Storage	:	–20°C to 60°C
Operating position	:	Horizontal only
Dimensions (WxHxD)	:	435 x 97 x 335 mm
Weight	:	5.8 kg
Format	:	VHS standard
Tape width	:	12.65 mm
Tape speed (SP)	:	23.39 mm/sec (PAL/SECAM/MESECAM) 33.35 mm/sec (NTSC)
(LP)	:	11.70 mm/sec (PAL/SECAM/MESECAM)
(EP)	:	11.12 mm/sec (NTSC)
Maximum recording time (SP)	:	240 min. with E-240 video cassette (PAL/SECAM/MESECAM) 160 min. with T-160 video cassette (NTSC)
(LP)	:	480 min. with E-240 video cassette (PAL/SECAM/MESECAM)
(EP)	:	480 min. with T-160 video cassette (NTSC)

VIDEO

Signal system	:	PAL and SECAM colour signal and CCIR monochrome signals, 625 lines/50 fields NTSC colour signal and EIA monochrome signal, 525 lines/60 fields
Recording system	:	Rotary two-head helical scan system with slant double-azimuth combination video heads
Input	:	0.5 to 2.0 Vp-p, 75 ohms, unbalanced (BNC)
Output	:	1.0 Vp-p, 75 ohms, unbalanced (BNC)
Signal-to-noise ratio	:	43 dB (PAL/SECAM/MESECAM), 45 dB (NTSC) (Rohde & Schwarz noise meter) with PICTURE SHARPNESS control at centre position
Horizontal resolution	:	240 lines (PAL/SECAM), 220 lines (NTSC) with PICTURE SHARPNESS control at centre position

AUDIO

Recording system	:	Longitudinal track
Input	:	–8 dBs, more than 50 k-ohms, unbalanced (RCA)
Output	:	–6 dBs, less than 1 k-ohm, unbalanced (RCA)
Frequency range	:	70 Hz to 10,000 Hz

RF OUT

PAL/SECAM	:	UHF 32 — 40 adjustable (preset E36ch)
USA	:	UHF 29 — 39 adjustable (preset 34ch)
JAPAN	:	UHF 28 — 38 adjustable (preset 33ch)

TIMER

Clock reference	:	Quartz-crystal
Program capacity	:	1-year programmable timer/8 programs

ACCESSORIES

Provided accessories	:	Aerial cable, Infrared remote control unit, "R6/AA/UM-3" battery x 2
Optional accessory	:	RM-G30U wired remote control

Specifications shown are for SP mode unless otherwise specified.
Design and specifications subject to change without notice.